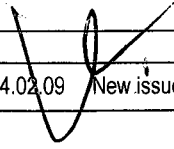
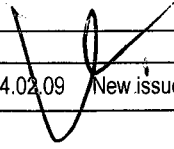


Date: Friday, 9/22/2006 12:00:48 PM
User: Chantal Lavoie











Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: BOLT
Job Number	: 28704		
Estimate Number	: 10372		
P.O. Number	: N/A	Part Number	: D312121
This Issue	: 9/22/2006 S.O. No. : N/A	Drawing Number	: D3121 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : MACHINED PARTS	Drawing Revision	: D
Previous Run	: 27851	Material	: N/A
Written By	: 	Due Date	: 9/29/2006
Checked & Approved By	: 	Qty:	68
Comment	: Est. A04.02.09 New issue KJ/DS	Um:	50 Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	M303H0500	303 HEX BAR
 		
<p>Comment: Qty.: 0.0417 f(s)/Unit Total: 2.0850 f(s)</p> <p>303 HEX BAR</p> <p>Material: AISI 303 SS 1/2" Hex Bar</p> <p>(M303H0.500)</p> <p>Batch: M102386</p>		
2.0	HARDINGE	HARDINGE CNC LATHE SMALL
 		
<p>Comment: HARDINGE CNC LATHE SMALL</p> <p>1-Turn D3121-21</p> <p>2-Identify as D3121-21</p> <p>3-Deburr break all sharp edges 0.005" to 0.010"</p>		
3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
 		
<p>Comment: INSPECT PARTS AS THEY COME OFF MACHINE</p>		
4.0	QC8	SECOND CHECK
 		
<p>Comment: SECOND CHECK</p>		
5.0	PACKAGING 1	PACKAGING RESOURCE #1
 		
<p>Comment: PACKAGING RESOURCE #1</p> <p>Identify and Stock</p> <p>Location: 51409</p>		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: LD Date: 06/10/12
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Friday, 9/22/2006 12:00:49 PM
User: Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BOLT

Job Number: 28704

Part Number: D312121

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



68

Comment: FINAL INSPECTION/W/O RELEASE

EB 06/15/12

Job Completion



U 26-10-12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

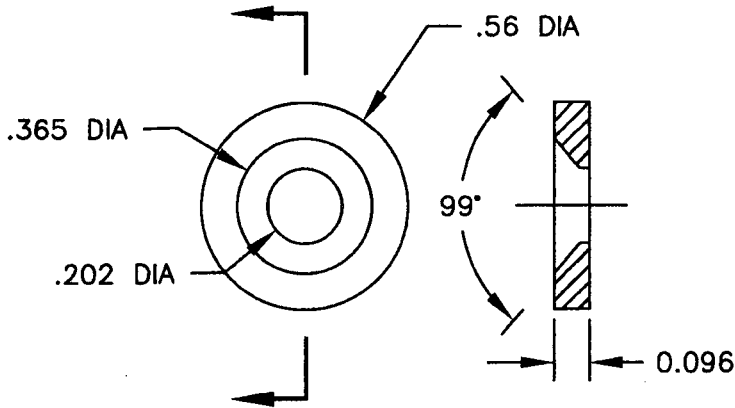
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

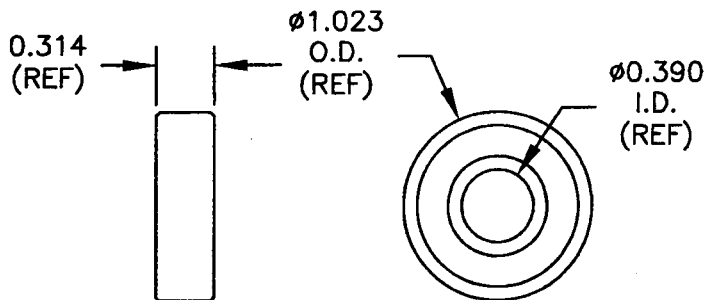
DART

REFERENCE ONLY

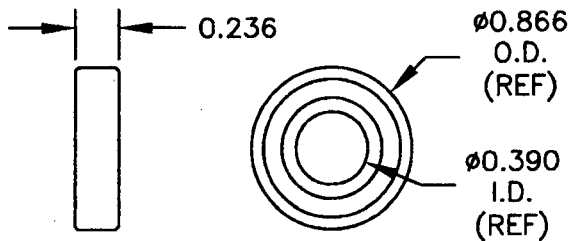
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CHECKED J.H.	APPROVED J.H.	DRAWING NO. D3121	REV. D SHEET 10 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:1

**D3121-17 WASHER (SCALE 2:1)**

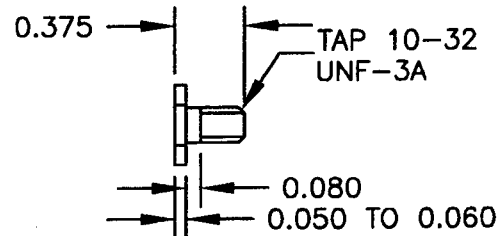
- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-19 BEARING (SCALE 1:1)**

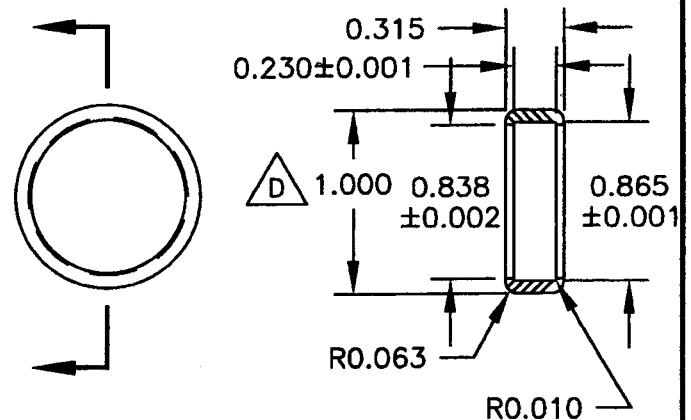
- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-22J/EM
FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-23 BEARING (SCALE 1:1)**

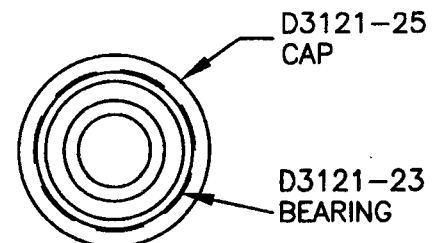
- 1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z
OR KML P/N 6900-2Z
- 2) ALL DIMENSIONS ARE IN INCHES

**D3121-21 BOLT (SCALE 1:1)**

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

**D3121-25 CAP (SCALE 1:1)**

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

RELEASED
06 06 02**D3121-241 BEARING ASSEMBLY (SCALE 1:1)**

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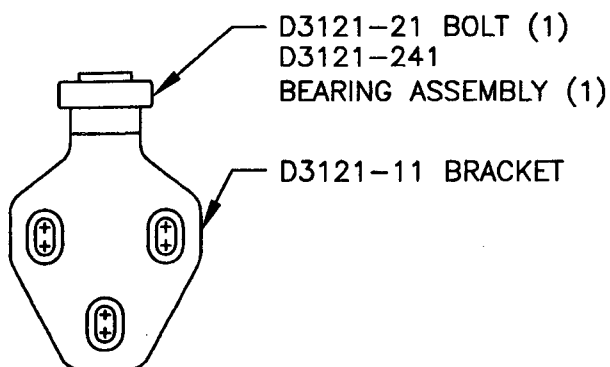
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CHECKED	APPROVED	DRAWING NO.	REV. D
		D3121	SHEET 1 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:2
A	02.04.15	NEW ISSUE	
B	03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146	
C	04.02.17	ADD CLEARANCE; USE -241 BEARING	
D	06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000	

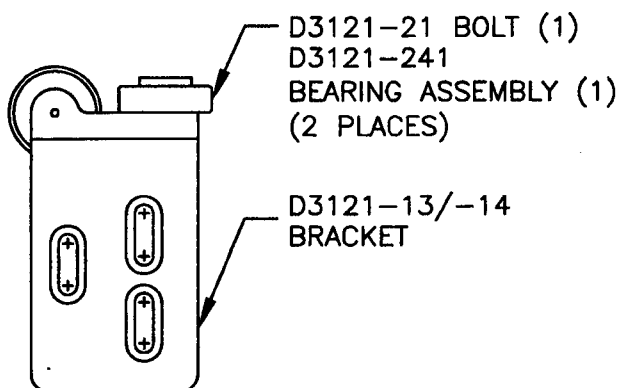
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06.06.02

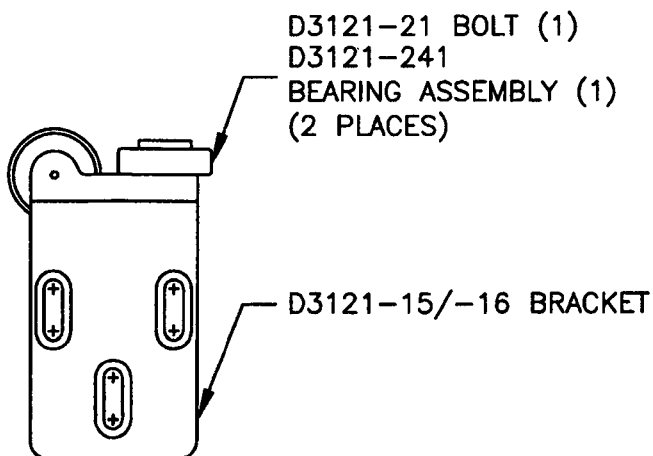


D3121-041 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-33)

REFERENCE ONLY



**D3121-043 (SHOWN) / D3121-044 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-37/-38)



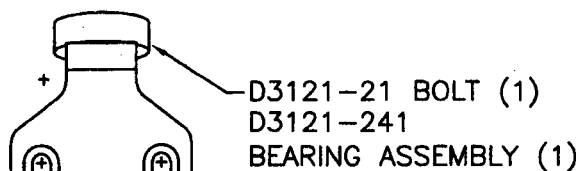
**D3121-045 (SHOWN) / D3121-046 (OPPOSITE)
BRACKET ASSEMBLY**
(REPLACES PREMIER P/N B30-23000-35/-36)

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CHECKED J.H.	APPROVED H	DRAWING NO. D3121	REV. D SHEET 2 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2



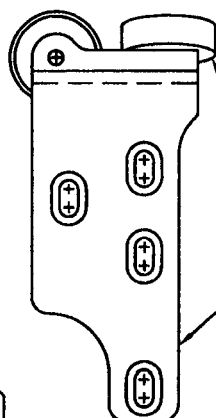
D3121-111 BRACKET

D3121-141 BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23001-01)

RELEASED

06.06.02 H

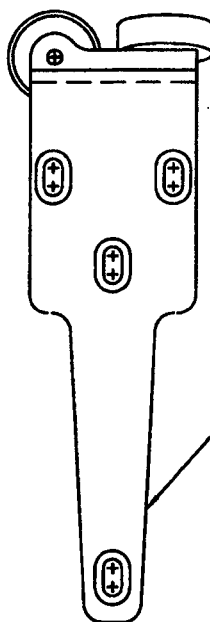
REFERENCE ONLY



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-113/-114 BRACKET

D3121-143 (SHOWN) / D3121-144 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-03/-04)



D3121-21 BOLT (1)
D3121-241 BEARING ASSEMBLY (1)
(2 PLACES)

D3121-115/-116
BRACKET

D3121-145 (SHOWN) / D3121-146 (OPPOSITE)
BRACKET ASSEMBLY
(REPLACES PREMIER P/N B30-23000-05/-06)

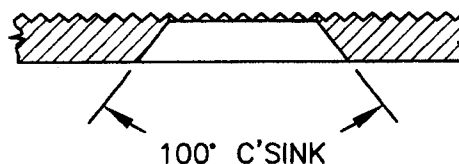
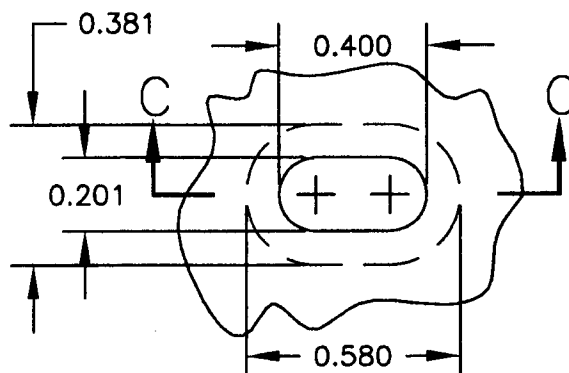
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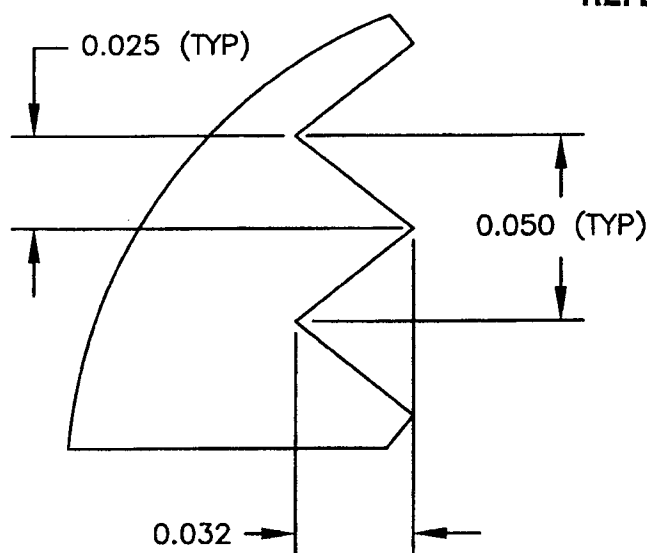
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CHECKED J.H.	APPROVED J.H.	DRAWING NO. D3121	REV. D SHEET 3 OF 10
DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:1

**DETAIL A:
SLOT DETAIL**
SCALE 2:1
VIEW ROTATED



**SECTION
C-C**

**DETAIL B:
RIDGE DETAIL**
PARTIAL SECTION
SCALE 1:20



REFERENCE ONLY

RELEASED

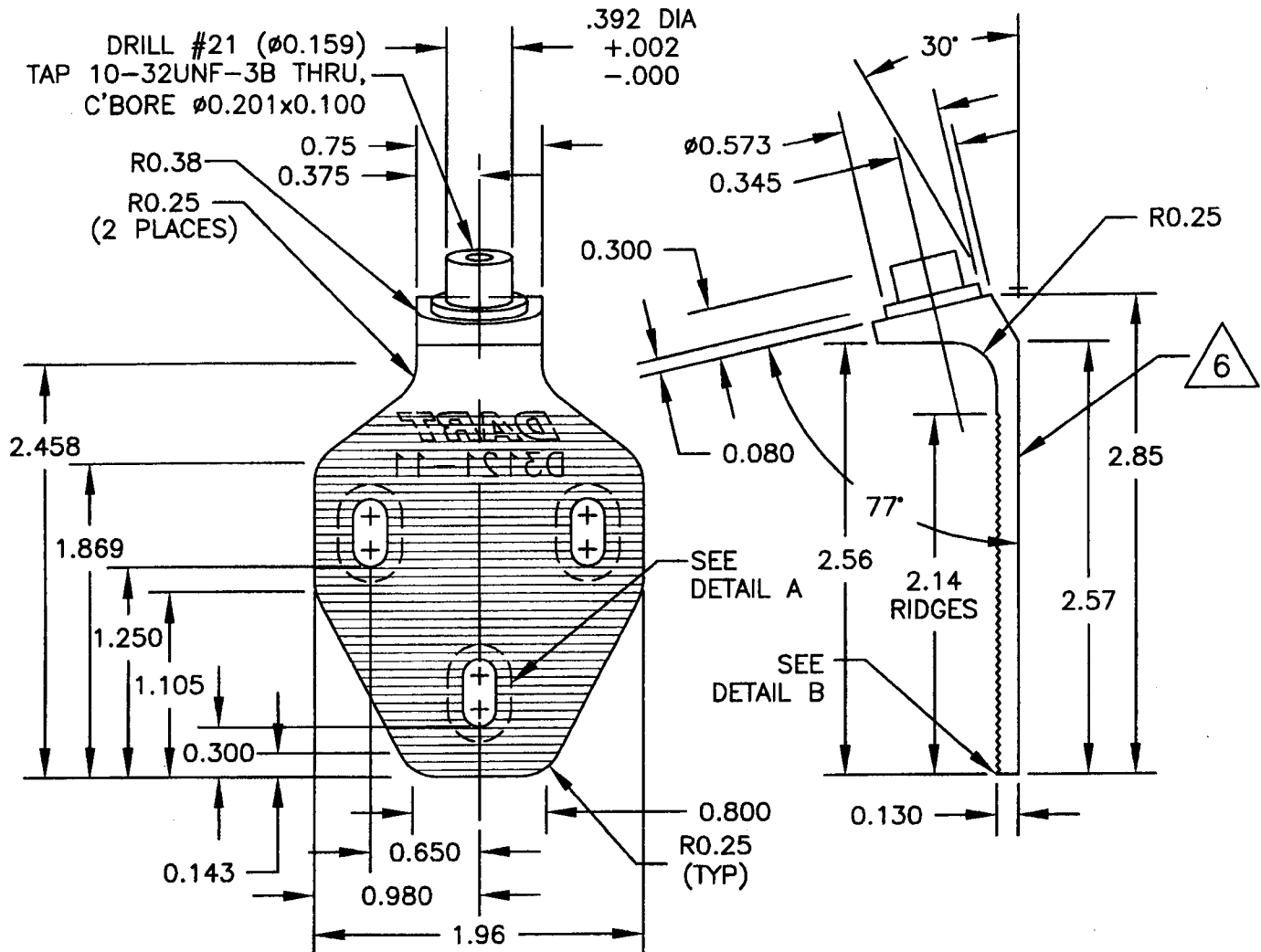
do do or J.H.

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CHECKED JH	APPROVED JH	DRAWING NO. D3121	REV. D SHEET 4 OF 10
DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:1



REFERENCE ONLY

D3121-11 BRACKET

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

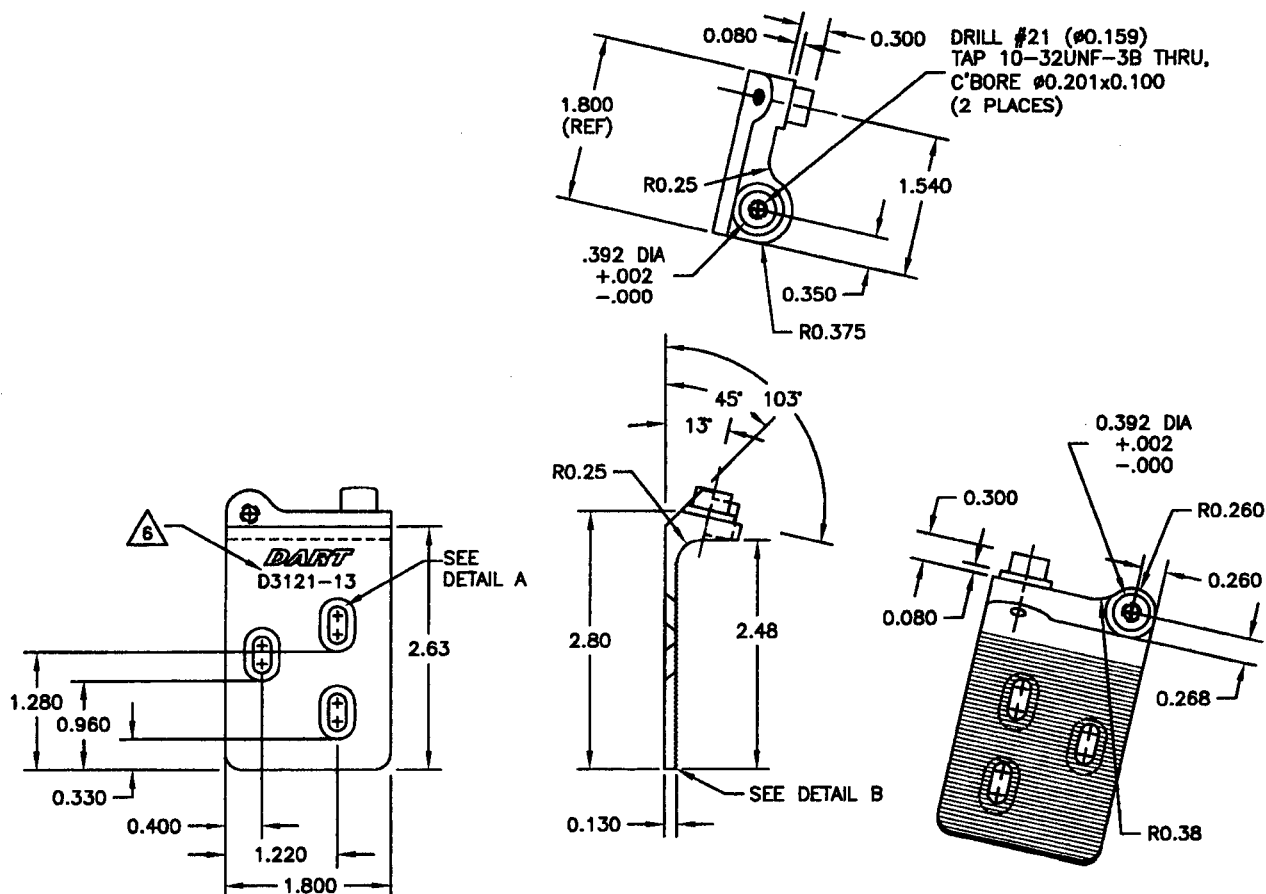
06-06-02 JH

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DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2



REFERENCE ONLY

D3121-13 BRACKET (SHOWN)**D3121-14 BRACKET (OPPOSITE)**

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N & LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

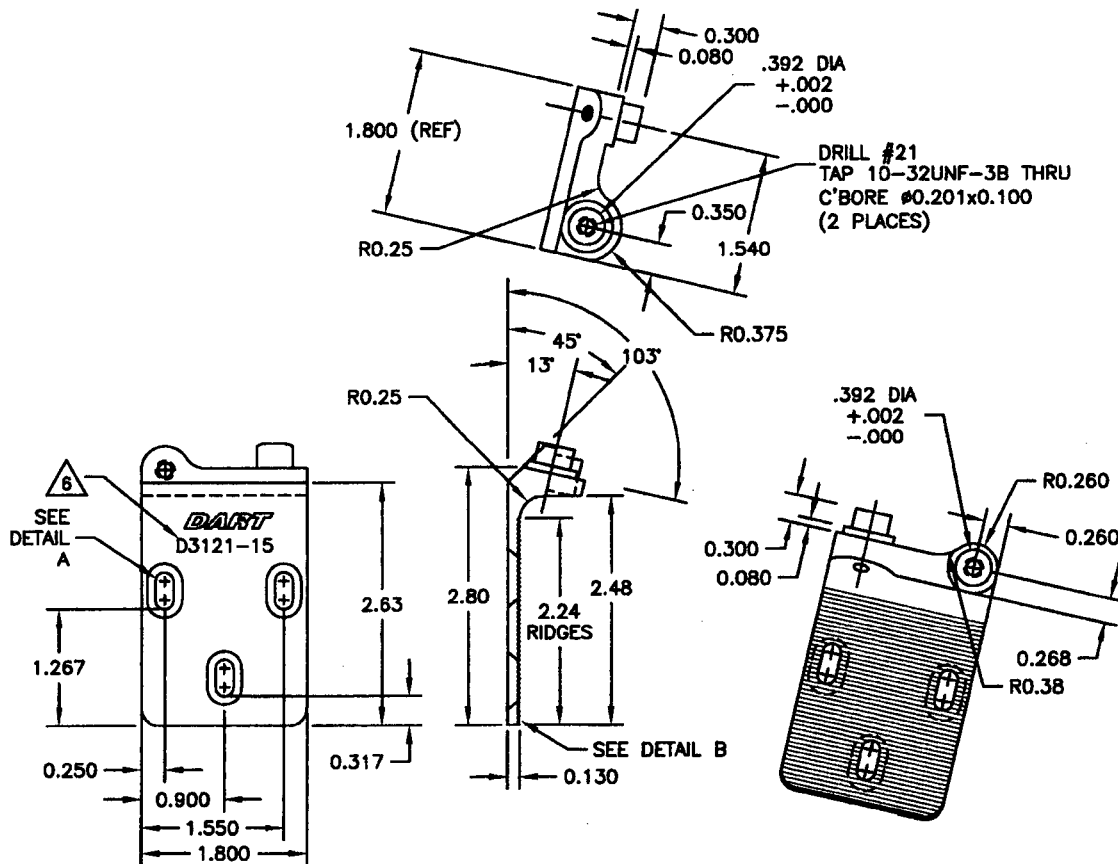
06.06.02 H.H.

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DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:2



REFERENCE ONLY

D3121-15 BRACKET (SHOWN)
D3121-16 BRACKET (OPPOSITE)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) ENGRAVE DART P/N AND LOGO AS SHOWN
- 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

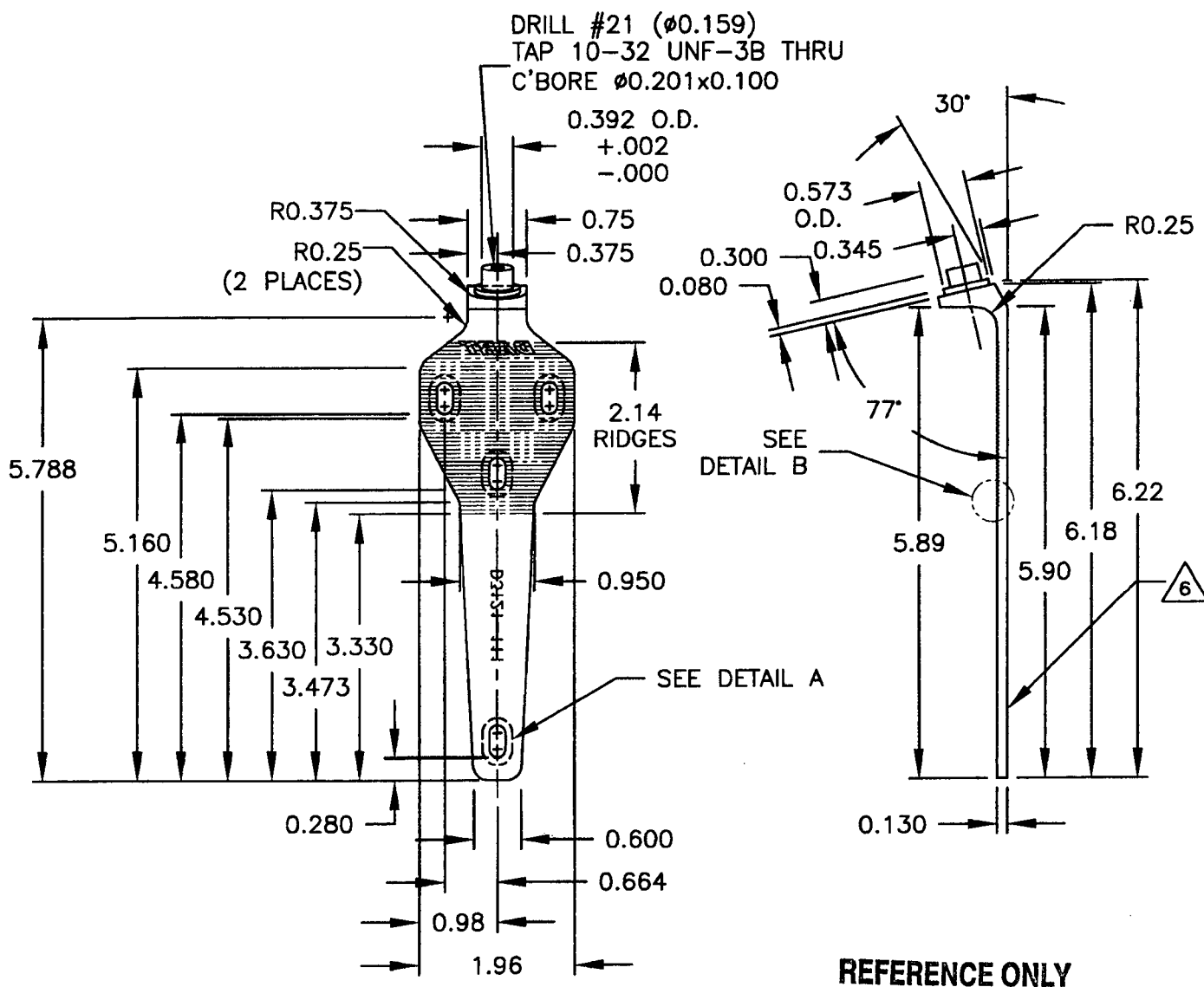
06-06-02 H.

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CHECKED JH	APPROVED JH	DRAWING NO. D3121	REV. D SHEET 7 OF 10
DATE 06.05.17	TITLE BRACKET ASSEMBLY		SCALE 1:2

**D3121-111 BRACKET**

- 1) REPLACES PREMIER P/N B32-23001-11
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi
MIN YIELD TENSILE = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

RELEASED

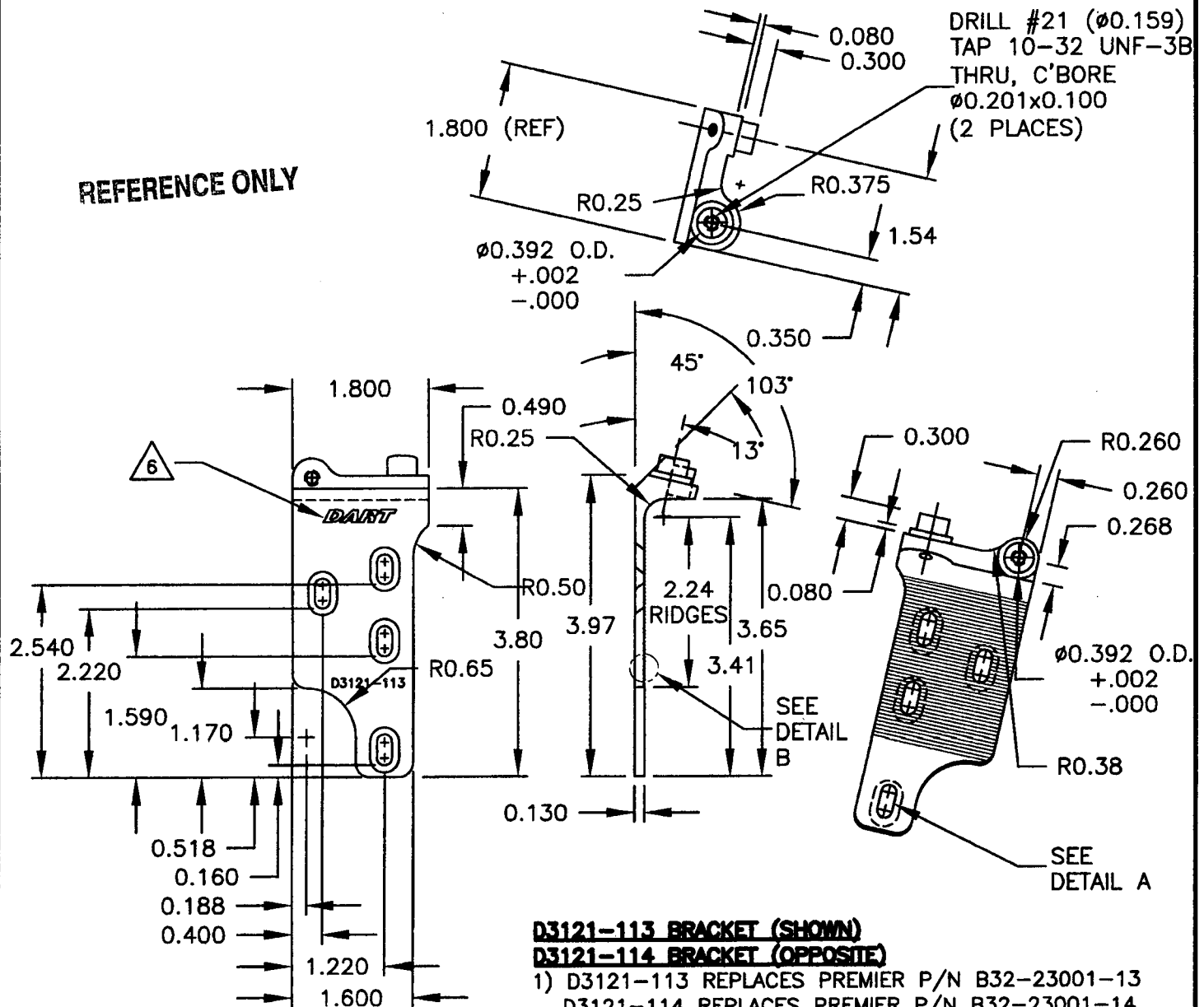
06.06.02 JH

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DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED #	DRAWING NO. D3121	REV. D SHEET 8 OF 10
DATE 06.05.17		TITLE BRACKET ASSEMBLY	SCALE 1:2

REFERENCE ONLY



RELEASED

06.06.02

D3121-113 BRACKET (SHOWN)

D3121-114 BRACKET (OPPOSITE)

- 1) D3121-113 REPLACES PREMIER P/N B32-23001-13
D3121-114 REPLACES PREMIER P/N B32-23001-14
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS
OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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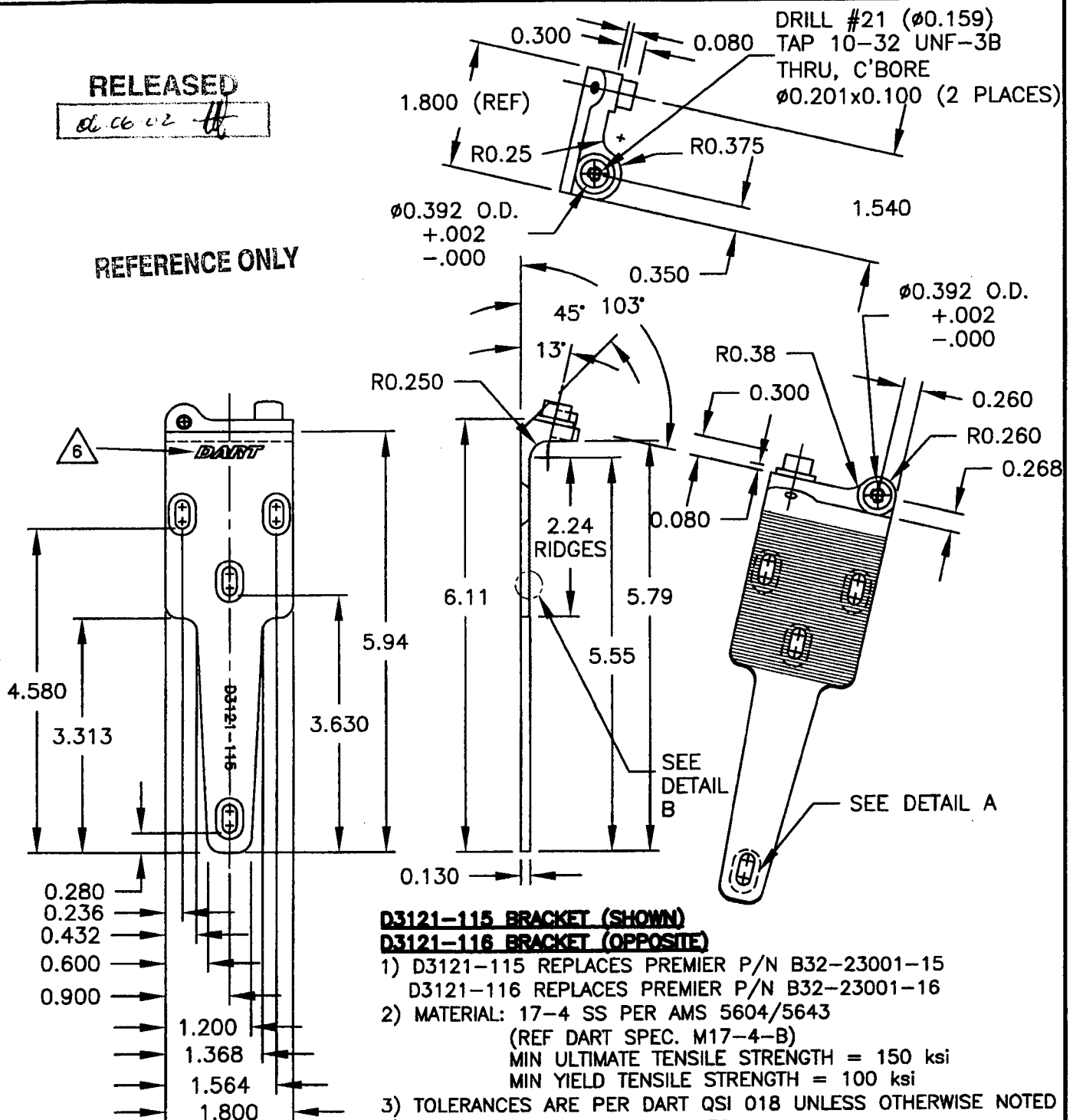
DART

DESIGN #	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED JH	APPROVED JH	DRAWING NO. D3121	REV. C SHEET 9 OF 10
DATE 04.02.18	TITLE BRACKET ASSEMBLY		SCALE 1:2

RELEASED

04.06.12 JH

REFERENCE ONLY

**D3121-115 BRACKET (SHOWN)****D3121-116 BRACKET (OPPOSITE)**

- 1) D3121-115 REPLACES PREMIER P/N B32-23001-15
D3121-116 REPLACES PREMIER P/N B32-23001-16
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE STRENGTH = 150 ksi
MIN YIELD TENSILE STRENGTH = 100 ksi
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN
- 7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

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DART AEROSPACE LTD	Work Order: 28704
Description: BOLT	Part Number: D3121-21
Inspection Dwg: D3121 Rev: D	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

x	First Article		Prototype
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[illegible]

Measured by:	06/10/06
Date:	

Audited by:	<i>gml</i>
Date:	06/10/06

Prototype Approval:	N/A
Date:	

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	